

State of Louisiana Coastal Protection and Restoration Authority

2015 Annual Inspection Report

for

Jonathan Davis Wetland Protection

State Project Number BA-20 Priority Project List 2

July 7, 2015 Jefferson Parish

Prepared by:

Luke Prendergast, P.E.
Coastal Protection and Restoration Authority
New Orleans Regional Office
CERM, Suite 309
2045 Lakeshore Drive
New Orleans, LA 70122



2015 Annual Inspection Report for Jonathan Davis Wetland Restoration (BA-20)

Table of Contents

I. Introduct	ion	1								
II. Project D	escription and History	1								
III. Inspection	n Purpose and Procedures	2								
IV. Inspection	n Results	3								
V. Conclusio	ons	5								
VI. Recommo	/I. Recommendations5									
Immediat	Immediate Repairs5									
Programr	ned Maintenance	5								
	Appendices									
Appendix A	Project Features Map									
Appendix B	Photographs									
Appendix C	Three Year Budget Projections									
Appendix D	Appendix D Field Inspection Form									





I. Introduction

The Jonathan Davis Wetland Protection (BA-20) project is located in Jefferson Parish within the Barataria Basin. It encompasses 7,199 acres (2,880 ha) of wetlands, which were classified as intermediate marsh in 1994 (OCPR 1998). The project is bounded on the north by the Pailet Canal, on the east by La. Hwy. 301, on the south by Bayous Perot and Rigolettes, and on the west by the Gulf Intracoastal Waterway (GIWW) (Appendix A).

II. Project Description and History

Overall, 1,393 ac (557 ha) of land within the Jonathan Davis Wetland Protection project area have been converted to open water between 1945 and 1989 (Coastal Environments Inc. 1991). The average rate of change of marsh to non-marsh (including loss to both open water and commercial development) has increased since the 1940s. National Biological Survey (NBS) Geographic Information System (GIS) habitat data from 1956 characterized the majority of the area as fresh marsh. However, the 1978 and 1990 data indicate that the area has become more saline. In both 1978 and 1990, the area was classified as primarily intermediate marsh. Chabreck and Linscombe (1988) also characterize the area as intermediate marsh.

Large scale factors influencing degradation in the Barataria basin include subsidence, lack of sedimentation, and reduced freshwater influx due to the levee system on the Mississippi River and its major distributaries. To compound this problem, there are no major external sources of inorganic sediment into the project area although some sediment does enter via the GIWW. Moreover, storm surges moving through numerous oil field canals within the area have facilitated the export of a large portion of the indigenous inorganic and organic sediments.

Other factors influencing wetland loss within the project area are increased water exchange, saltwater intrusion, tidal scour, and shoreline erosion along Bayous Perot and Rigolettes. Shoreline erosion from 1945 to 1989 caused primarily by wave action along Bayou Perot has been measured at 20 ft/yr (6.1 m/yr). Saltwater intrusion and tidal scour are believed to have been enhanced with the construction of various oil field canals that were dredged in the 1940s when oil companies were not responsible for maintaining a continuous spoil bank along the canals. As a result, the breaches that occurred were not repaired and subsequently exposed the interior marsh to increased tidal flows and salinity during storm surges.

Project features consist of shoreline protection, rock armored plugs, rock weirs, and weirs with boat bays. Construction Unit 1, which consists of project features 12, 13, 14, 15, 16, 17, 19, 20, and 21, was completed in September 1998. Construction Unit 2 was completed in May 2001. It encompassed installing a weir at structure 22, and shoreline





protection from structures 20 to 22. Construction Unit 3, which consists of shoreline protection extending from project feature 12, west to the Gulf Intracoastal Waterway, was completed on July 7, 2003. Construction Unit #4, completed in January 2012, consists of rip-rap and pre-cast concrete shoreline protection extending across the northern edge of Bayou Rigolettes and Bayou Perot, from just east of Structure #12 to Structure #20. Construction of features 1, 2, 3, 6, 8, 9, 10, and 11 in the northern project area has been deferred due to the anticipated positive influence of Davis Pond Diversion, lack of funding, and land rights issues. (Appendix A)

On January 30, 2002, Stone Energy Corporation was issued a Coastal Use Permit to plug and abandon existing wells within the Jonathan Davis Wetland Protection Project. This work was completed on 7/18/02 and consisted of removing and replacing structures 13 & 19 to plug and abandon several existing wells located behind these structures. The cost associated with removing and replacing these structures was incurred entirely by Stone Energy Corporation. However, at the request of NRCS, OCPR was required to provide inspection services for this project. OCPR obtained the services of GSE Associates, Inc. to inspect construction activities and prepare a project completion report and as-built drawings. These services were performed for a total cost of \$9,394.13.

As part of the construction documents prepared by NRCS for this project, Stone Energy Corporation was required to reconstruct structure 13, increasing the boat bay crest from 50' to 100' in width and raising the crest elevation from -5.0' NGVD to -2.5' NGVD.

As part of work for Construction Unit 4, maintenance was performed on structures 14, 15, and 17. Due to the location and activity of a pipeline in the vicinity of Structure 16 no work was performed there. However, due to the location and infilling in front of Structure 16, no work is required.

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Jonathan Davis Wetland Protection (BA-20) project is to evaluate the constructed project features to identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions. Should it be determined that corrective actions are needed, CPRA shall provide a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan March 18, 2002). The annual inspection report also contains a summary of maintenance projects and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A summary of past operation and maintenance projects completed since construction of the project are outlined in Section II.

An inspection of the Jonathan Davis Wetland Protection (BA-20) project was held on June 17, 2015 by Luke Prendergast and Melissa Hymel of CPRA, along with Quin Kinler





of NRCS. Photographs taken during the inspection are included in Appendix B of this report.

IV. Inspection Results

Construction Unit No. 1

Structure No. 12 – Rock rip-rap armored plug

Minor settlement has occurred, but the structure is in good condition. No maintenance needs were identified at this location.

Structure No. 13 – Rock rip-rap armored weir w/ boat bay

High water levels and structure settlement prevented a detailed inspection of the weir. Signs and timber supports were generally in good condition. No maintenance will be required at this time.

Structure No. 14 – Rock rip-rap armored plug

Structure was in good condition, with some settlement noted. There is currently no need for maintenance on this structure.

Structure No. 15 – Rock rip-rap weir w/ boat bay

Weir was converted to a rock plug structure as part of the work effort for Construction Unit 4. No defects were noted during the inspection.

Structure No. 16 – Rock rip-rap channel plug

Rip-rap and warning signs appeared to be in good condition. No immediate maintenance requirements were identified at this structure.

Structure No. 17 – Rock rip-rap channel plug

Plug appeared to be in good condition, with no maintenance needed at this time.

Structure No. 19 – Rock rip-rap weir w/ boat bay

Weir has experienced some settlement, but is performing as designed. Warning signs and timber supports were in good condition. No maintenance is required at this time.





Structure No. 20 – Rock rip-rap armored plug

The rock plug was heavily vegetated at the time of inspection, but appeared to be in good condition. No maintenance needs were identified at this location.

Structure No. 21 – Rock rip-rap armored plug

No significant defects were noted. Structure is generally in good condition and requires no maintenance at this time.

Construction Unit No. 2

Structure No. 22 A – Canal bank stabilization

The structure appeared to be in good condition. No immediate maintenance concerns were noted at this site.

Structure No.22 – Steel sheet pile weir w/ boat bay

Weir was partially obscured by aquatic vegetation, but no significant defects were noted on the visible portion of the structure. Warning signs and supports were in good condition. No maintenance is required at this time.

Bayou Rigolettes Bank Stabilization

The rock appears to be in good condition. Minor settlement was observed near the western end of this feature, but the shoreline protection function was being adequately performed. This area should be monitored on future inspections, but no immediate maintenance will be required.

Construction Unit No. 3

Bayou Perot Bank Stabilization

No significant changes were noted since the last inspection. The rock shoreline protection appeared to be in good condition, with minor settlement in some areas. The areas of lower elevation deserve continued observation on future inspections, but no maintenance needs were identified at this time.

Construction Unit No. 4

Concrete Panel Wall Shoreline Protection

No defects in the concrete panel wall sections were noted; the structure appeared to be in good condition. Minor damage/vandalism to some warning signs was noted, but all signs





and timber supports are in place and performing as designed. No immediate maintenance needs were identified at this construction unit.

V. Conclusions

The project is meeting the goal of reducing shoreline erosion in this area. Structures appeared to be in generally good condition, with no maintenance required at this time. Areas where settlement has been noted will be assessed annually, and any future maintenance needs will be jointly determined by NRCS and CPRA as circumstances warrant.

VI. Recommendations

Continue to inspect and assess project conditions annually.

Immediate Repairs

• None at this time.

Programmed Maintenance

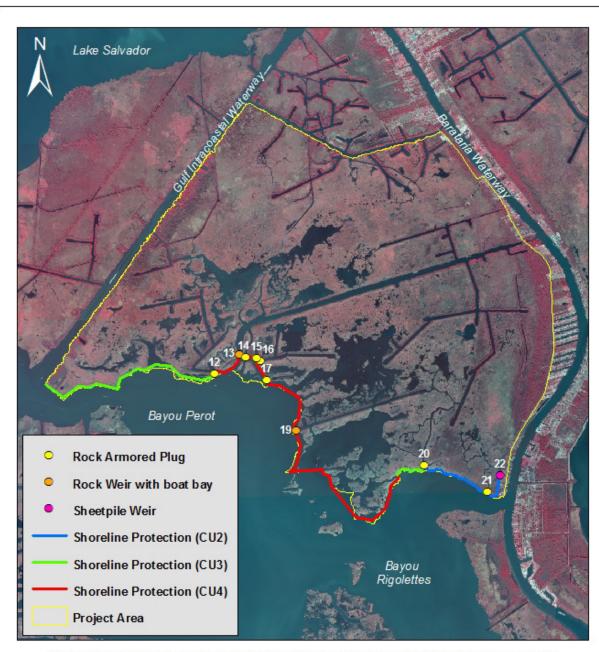
• None at this time.



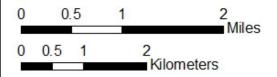


Appendix A

Project Features Map



JONATHAN DAVIS WETLAND RESTORATION (BA-20)





Map Produced by: Coastal Protection and Restoration Authority New Orleans Field Office October 20, 2011

Background Imagery: 2008 CIR DOQQ **Appendix B**

Photographs



Photo #1 – Bayou Perot Shoreline Protection (CU3)



Photo #2 – Structure No. 12



Photo #3 – Structure #15



Photo #4 – Structure #16



Photo #5 – Structure #19



Photo #6 – Riprap Shoreline Protection (CU4)



<u>Photo #7 – Panel Wall Shoreline Protection (CU4)</u>



Photo #8 – Bayou Rigolettes Shoreline Protection (CU2)

Appendix C Three Year Budget Projection

Jonathan Davis Wetland Restoration Project (BA-20)

Federal Sponsor: NRCS

Construction Completed: 5/29/2001

PPL 2

Current Approved O&M Budget	Year 0	Year - 1	Year -2	Year-3	Year -4	Year -5	Year -6	Year -7	Year -8	Year -9	Year -10	Year -11	Year -12	Year -13	Year -14	Year -15	Year -16	Year - 17	Year -18	Year -19	Currently
June 2009	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Funded
State O&M																					\$7,287,736
Corps Admin																					\$0
Federal S&A																					\$0

Total \$7,287,736

Projected O&M Expenditures

Remaining Project Life

Maintenance Inspection								\$6,016	\$6,172	\$6,333	\$6,498	\$6,667	\$6,840	\$38,526
General Maintenance														\$0
Surveys								\$150,000						\$150,000
Sign Replacement														\$0
Federal S&A								\$9,361	\$132,967					\$142,328
Maintenance/Rehabilitation														\$0
E&D									\$198,005					\$198,005
Construction									\$3,000,000					\$3,000,000
Construction Oversight									\$120,000					\$120,000
Total								\$165,377	\$3,457,144	\$6,333	\$6,498	\$6,667	\$6,840	\$3,648,858

O&M Expenditures from COE Lana Report	\$1,263,739	Current O&M Budget	\$7,287,736	Currently Funded Budget	\$7,287,736
State O&M Expenditures not submitted for in-kind credit	\$0	Total Estimated Expenditures	\$1,274,136	Current + Projected Expenditures	\$4,922,994
Federal Sponsor MIPRs (if applicable)	\$10,397	Remaining Available O&M Budget	\$6,013,600	Project Life Budget Shortfall (Surplus)	(\$2,364,742)
Total Estimated O&M Expenditures (as of June 2015)	\$1,274,136				

Appendix D

Field Inspection Forms

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.1 -Site No. 12 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Rock rip-rap armored plug Water Level Inside: N/A Outside: 1.25'

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good			2	
Armored plug	Good			2	No change since last inspection; maintenance not required at this time.
Earthen Embankment	Good				
Construction Un					
•		rock rip-rap armored at, west of Bayou Bara			
		et at an elevation of +			
		d with 2,518 tons of ri	p-rap armor. Al	uminum	
warning signs are	also located in the	rock embankment.			

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.1 -Site No. 13 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Rock rip-rap armored weir Water Level Inside: N/A Outside: 1.25'

Type of Inspection: Annual Weather Conditions: Mostly sunny, light wind

tons of rip-rap armor. Aluminum warning signs are located adjacent to the structure.

Item	Condition	Pysical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good				
Armored Weir	Fair				Structure has experienced some settlement, but maintenance is not required at this time.
Earthen Embankment	Good				
Construction Ur	nit No.1				
wide boat bay loc east of the GIWV invert of the boat constructed to an	ated north of Bayou V. The crest of the t bay is set at an e n elevation of +3.6 ff	rock rip-rap armored Perot and Site 12, weir is set at an elevation of -5.0 ft. Not. NGVD. on the westilled weir contains 1,000.	vest of Bayou E vation of +1.0 ft GVD. Rock wi t side and +4.0	Barataria, and t. NGVD. The ngwalls were) ft. NGVD on	

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.1_-Site No. 14 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Rock rip-rap armored plug Water Level Inside: N/A Outside: 1.25'

Item	Condition	Pysical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good				Observations:
Armored Plug	Good				Slight settlement noted, but no repairs needed at this time.
Earthen Embankment	Fair				
located in a pipeli of GIWW and Site NGVD. The rock	otion: 138 linear ft. ne channel north o e 13. The crest of th filled plug contains	of rock rip-rap armo f Bayou Perot, west ne plug was construc 2,580 tons of rock fi are located through	of Bayou Barat ted to an elevat Il and 1,346 tor	aria and east tion of +3.2 ft. ns of rock rip-	

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.1 -Site No. 15 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Rock rip-rap armored weir w/ boat bay

Water Level Inside: N/A Outside: 1.25'

Item	Condition	Pysical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good			3	
Armored Plug	Good			3	This structure was converted into a channel plug as part of the completed CU4 maintenance work.
Earthen Embankment	Good				
Construction Ur	nit No.1	•			
boat bay located and east of the G elevation of +4.0 t rock filled weir co	in a pipeline chann GIWW and Site 14. ft. NGVD. The inver ntains 1,248 tons o n warning signs ard	of rock rip-rap armel north of Bayou Pe The crest of the rock t of the boat bay is at f rock fill with and 72 e located through the	rot, west of Ba weir was cons and elevation of 8 tons of rock r	you Barataria structed to an of -3.0 ft. The rip-rap armor.	

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.1 -Site No. 16 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Rock rip-rap armored plug Water Level Inside: N/A Outside: 1.25'

Item	Condition	Pysical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good			4	
Armored Plug	Fair			4	No maintenance needs identified at this time.
Earthen Embankment	Good				
north of Bayou Pe crest of the plug v plug contains 6,48	ck rip-rap armored erot, west of Bayou was constructed to 33 tons of rock fill a	rock filled plug locate Barataria, east of the an elevation of +4.0 f nd 1,766 tons of rock through the rock plug	GIWW and Sit t. NGVD. The re rip-rap armor.	te 15. The ock filled Two (2)	

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.1 -Site No. 17 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Rock rip-rap armored plug Water Level Inside: N/A Outside: 1.25'

Item	Condition	Pysical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good				
Armored Plug	Good				No maintenance is required at this time.
Earthen Embankment	Good				
channel north of E crest of the plug constructed from	tion: 197 linear ft. Bayou Perot, west was constructed to 2,253 tons of rock	of rip-rap armored ro of Bayou Barataria, a o an elevation of 3.8' k fill and 1,201 tons ed pipe are located in	and east of the NAVD. The roof rip-rap armo	GIWW. The ock plug was or. Aluminum	

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.1 -Site No. 19 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Rock rip-rap armored weir Water Level Inside: N/A Outside: 1.25'

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks					
Signage and supports	Good			5						
Armored Weir	Good			5	No change since last inspection; no maintenance needs were identified.					
Earthen										
Embankment	Good									
Construction Ur	nit No.1									
Structure Descrip	otion: 239 linear f	t. of rock rip-rap arn	nored rock fille	d fixed crest						
weir with a 60 ft.	wide boat bay locat	ed in a pipeline chan	nel east of the	GIWW, north						
of Bayou Perot, a	and west of Bayou	Barataria. The crest	of the weir was	s constructed						
to an elevation of	elevation of +1.9 ft. NGVD on the north side and +2.0 ft. NGVD on the south.									
The boat bay inve	ert was constructed	d to an elevation of -2	2.5 ft. NGVD. T	he rock filled						
plug contains 1,0	14 tons of rock fill	with 572 tons of roo	ck rip-rap armo							
warning signs a	are located on ea	ach side of the bo	oat bay throu							
embankment.										

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.1 -Site No. 20 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Rock rip-rap armored plug Water Level Inside: N/A Outside: 1.25'

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good				
Armored Plug	Good				No change since previous inspection; maintenance is not required at this time.
Earthen Embankment	Good				
north of Bayou R plug crest was c contains 1,829 tor	otion: 170 linear ft. igolettes, west of lonstructed to an one ons of rock fill with 7	of rock rip-rap armon Bayou Barataria, and elevation of +4.0 ft. 95 tons of rock rip-rand of the structure thr	d east of Bayo NGVD. The roup armor. Two	u Perot. The ock filled plug (2) aluminum	

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.1 -Site No. 21 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Rock rip-rap armored plug Water Level Inside: N/A Outside: 1.25'

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good				
Armored Plug	Good				Maintenance is not required at this time.
Earthen Embankment	Good				
Construction Unit No.1 Structure Description: 83 linear ft. of rock rip-rap armored rock filled plug located north of Bayou Rigolettes, west of Bayou Barataria, and east of Bayou Perot. The plug crest was constructed to an elevation of +4.0 ft. NGVD. The rock filled plug contains 285 tons of rock fill and 220 tons of rock rip-rap armor. Two (2) aluminum warning signs supported by galvanized pipe are located on each end of the structure through the rock embankment.					

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.2 -Site No. 22A Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Canal Bank Stabilization Water Level Inside: N/A Outside: 1.25'

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good				
Rock Armored Bank	Good				No maintenance needs were identified.
Earthen Embankment	Good				
Construction Unit No.2 Structure Description: Canal bank stabilization consisting of 1,385 linear ft. of rock rip-rap protection on the west bank of the access channel at the Baltazaar Point Subdivision. The rip-rap was constructed to an elevation of +3.0 ft.					

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.2 -Site No. 22 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Steel sheet pile structure w/ boat bay

Water Level Inside: N/A Outside: 1.25'

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Steel Bulkhead / Caps	Good				No significant defects noted. Structure does not require maintenance at this time.
Handrails Hardware, etc.	Good				
Signage and supports	Good				
Earthen Wingwalls	Good				
Rock Armored Earthen Embankment	Good				
Construction Un	it No.2	•			
of +1.95 ft. and a off of Bayou Rego consists of a stee At the bottom the invert of -0.93 ft.	24' - 8-1/2" wide to blettes, west of Bat I sheet pile weir with boat bay, is a 1.5 This structure ties	of steel sheet pile bul poat bay with a crest you Barataria and ea th 1,426 square feet of 5 ft. thick rock rip-rap is into structure 22A of meter timber piles ar	elevation of -0. st of GIWW. of sheet piling so scour pad seon the west side.	93 ft. located The structure et at +1.95 ft. citon with an de. Aluminum	

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.2 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Rock dike along Bayou Rigolettes Water Level Inside: N/A Outside: 1.25'

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good				
Armored plug	Good				
Rock Dike	Good; see remarks			8	Minor settlement observed in some areas, no repairs needed at this time.
Earthen Embankment	Good				
Construction Unit No.2 Structure Description: The rock dike consist of 3,967 linear ft. of rock dike with a 6 ft. top width and a crest elevation of +3.5 ft. The shoreline stabilization extends from Site 22A west to Structure No.20.					

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No.3 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Rock dike along Bayou Perot Water Level Inside: N/A Outside: 1.25'

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good				
Armored plug	Good				
Rock Dike	Good; see remarks			1	Minor settlement observed in some areas, no repairs needed at this time.
Earthen Embankment	Good				
Construction Un	it No.3				
·		consist of 13,088 line			
		f +3.5 ft. The shoreling	e stabilization (extends	
from Site 12 west to the Gulf Intracoastal Waterway					

Project No. / Name: **BA-20 Jonathan Davis Wetland**Date of Inspection: 6/17/2015

Time: 9:30 am

Structure No. Construction Unit No. 4 Inspector(s): Prendergast, Kinler, Hymel

Structure Description: Concrete panel wall Water Level Inside: N/A Outside: 1.25'

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Signage and supports	Good	Minor; see remarks		7	Some fading noted, minor spray-paint vandalism to border of one sign was observed. Sign faces and text were legible; no repairs needed at this time.
Concrete wall panels, piles, hardware	Good			7	No defects noted; structure was performing as designed.
Rock Dike	Good			6	No defects noted; structure was performing as designed.
Construction Un	it No.4	ļ			
Structure Descrip concrete wall sec approx. 4,290 line C.U. #4 extends a	tion: The wall con tions supported by ar feet of rock rip-r cross the northerr	sists of approx. 12,85 848 pre-cast concret ap bank stabilization/s n edge of Bayou Rigole 2 to Structure #20.	e piles, in addit shoreline protec	ion to ction.	